

CLAIMS

We claim:

1. An apparatus for simulating a pulse and correlated heart beat of an animal, the apparatus comprising a playback device for generating a first electronic signal corresponding to a pulse and a second electronic signal corresponding to a correlated heart beat, a tactile pulse simulator for receiving the pulse signal and generating a pressure pulse discernible by touch and an audio simulator for receiving the heart beat signal and recreating the heart beat to be heard through a stethoscope.

2. An apparatus for simulating a right side pulse and a left side pulse and correlated heart beat of an animal, the apparatus comprising a playback device for generating a first electronic signal corresponding to the right side pulse, a second electronic signal corresponding to the left side pulse and a third electronic signal corresponding to a correlated heart beat, a first tactile pulse simulator for receiving the right pulse signal, a second tactile pulse simulator for receiving the left pulse signal and generating a pressure pulse discernible by touch and an audio simulator for receiving the heart beat signal and recreating the heart beat to be heard through a stethoscope.

3. A method for training health care provides in the proper use of a stethoscope including the steps of placing a user's finger on a tactile pulse simulator of the apparatus of claim 1, placing a stethoscope listening end on an audio heart beat simulator, placing stethoscope ear pieces in a user's ear and sensing different cardiovascular conditions including normal and abnormal conditions.

4. A method for training health care provides in the proper use of a stethoscope including the steps of placing a first finger on a right side tactile pulse simulator of the apparatus of claim 2, placing a second finger on a left side pulse simulator, placing a stethoscope listening end on a audio heart beat simulator, placing stethoscope ear pieces in a user's ear, generating a pulse and correlated heart beat signal in a playback unit and sensing different

6 cardiovascular conditions including normal and abnormal conditions.

1 5. A system comprising a digital processing unit (DPU) subsystem having a user
2 interface, bodily attribute generation software and an input apparatus and output apparatus
3 for human-DPU interaction, a visual output subsystem, an acoustic output subsystem, and/or
4 a tactile output subsystem, where the input and output apparatus, the generation software and
5 the output subsystems operate to visually, acoustically and tactually simulate different animal
6 including human conditions so that the visual, audio and tactile outputs are temporally
7 coupled for a more realistic simulation of symptoms of a desired condition.

1 6. An apparatus including a digital processing unit (DPU) having a user interface, a
2 bodily attribute generation software and an input device and output device for human-DPU
3 interaction, a visual output device in communication with the DPU, an acoustic output device
4 in communication with the DPU and/or a tactile output device in communication with the
5 DPU, where the DPU, through interaction with a user via the input and output devices, the
6 generation software and the output subsystems, visually, acoustically and/or tactually
7 simulates different animal including human conditions so that the visual, audio and tactile
8 outputs are temporally coupled for a more realistic simulation of symptoms of the desired
9 condition.

1 7. A method for training/teaching a user, where the method includes interacting with a
2 user interface of a DPU via an input apparatus and output apparatus and identifying a
3 condition of an animal including a human from audio, visual and/or tactile output generated
4 in the DPU and outputted to an audio output, a visual output and/or a tactile output which
5 simulate symptoms of the condition from a list of conditions generated by the DPU.

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